

### **REMARKS**

In response to the final Official Action of January 22, 2007, claims 1, 8, 10 and 16 have been amended in a manner which is believed to particularly point out and distinctly claim the invention and so as to clarify the distinction of the claimed invention over Sutter. It is believed that the amendment to the claims does not raise any new issues since it was argued in applicant's previous amendment filed on October 27, 2006 that the invention as claimed performed actions corresponding to those now recited in the amended claims. However, as pointed out in the final Official Action, the previously presented independent claims, including independent claim 1, could, at least as argued by the Office, be interpreted to read on Sutter for the reasons presented in the "Response to Arguments" section. It is therefore respectfully submitted that no further examination is required based upon the presently amended claims.

Applicant's attorney would also like to thank Examiner Wood for his helpful comments made during a telephone interview on April 20, 2007 at which time clarification was made by Examiner Wood concerning statements at page 6 of the final Official Action in said section, particularly with regard to lines 13-15. Examiner Wood also indicated that applicant might be able to distinguish the claimed invention over Sutter if clarification was made concerning what was meant by "last instruction sequence".

As indicated above, amendment has been made in response to the Examiner's comments. For example, with respect to amended claim 1 and the basic blocks of instructions, each basic block has a last instruction and that the action of creating a function, including a longest sequence of last instruction sequences common to at least two blocks, requires that the longest sequence includes said last instruction for each of said at least two blocks. As such, it is clear that the longest sequence of last instruction sequences common to at least two basic blocks always includes the last instruction in the basic blocks of instructions which gives rise to the advantageous feature of the present invention as claimed; namely, replacing the original occurrences of the instruction

sequences in the plurality of sequences of last instruction sequences with a reference to a proper position in the created function. By so doing, the portion in each basic block which includes an instruction sequence having the same last instruction is removed from a basic block and replaced with a reference to the proper position in the longest sequence of last instruction sequences common to at least two basic blocks, where the last instruction sequence for a basic block is common (of equal or shorter length) with this longest sequence of last instruction sequences. The point is that the common longest sequence includes the last instructions of the at least two basic blocks.

In this regard and in reference to paragraph 2 of the final Official Action, it is respectfully submitted that the present invention as amended is clearly distinguished over Sutter, including recited Section 4.3. Sutter is completely silent about any requirement that the longest sequences or any other sequences in its abstraction process must include the last instruction of a basic block of instructions. Rather, Sutter, as discussed at Section 4.3, makes a separate pass over the entire code for all possible instruction sequence lengths and for each length  $n$  all occurring sequences of that length are collected and pre-partitioned according to a fingerprint and for each partition, identical sequences are collected. There is no teaching in Sutter that a function is created that includes a longest sequence of last instruction sequences common to at least two basic blocks and which includes a last instruction for each of said at least two basic blocks.

It is therefore respectfully submitted that Sutter does not anticipate claim 1 as amended.

For similar reasons, Sutter does not anticipate claims 8 and 10 since these claims have been amended in a manner similar to amended claim 1.

Similarly, independent 16 directed to an electronic device is believed to be distinguished over Sutter since it is also amended in a manner similar to claim 1. It is noted that although it is rejected at page 5 of the final Official Action in the section entitled "Claim 11-17", no specific reference is made to claims 15-17.

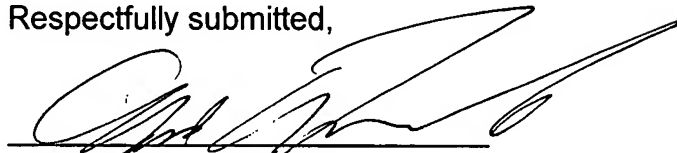
Applicant's attorney respectfully requests Examiner Wood to call him if the Office has any remaining questions.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

The undersigned respectfully submits that no fee is due for filing this Amendment. The Commissioner is hereby authorized to charge to deposit account 23-0442 any fee deficiency required to submit this paper.

Dated: April 23, 2007

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alfred A. Fressola', is written over a horizontal line.

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